

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) In a telecommunications system in which a plurality of User Equipments (UEs) communicate with a common station via communication signals having a system frame format with at least one commonly used time slot (CUTS) per frame which is available for common use by the UEs for transmitting code identified signals for a specific uplink channel, where the UEs select a code identifier from a plurality of identifiers and where a UE transmission with a selected code identifier in a selected CUTS will fail if another UE transmits with the same code identifier in the same CUTS or if the UE transmission lacks sufficient power, a communication method comprising:

determining the number of successful and failed UE transmissions in CUTSs per frame that are received by the common station from the plurality of UEs; and

adjusting one or more communication parameters in response to said determination; and

broadcasting by the common station the adjusted one or more communication parameters.

2. (Currently Amended) The method of claim 1 wherein the number of successful and failed UE transmissions in CUTSs is determined for individual system frames further comprising:

broadcasting a dynamic persistence parameter (DP) ~~parameter DP~~ upon which the UEs determine an access rate for transmitting in CUTSs; and

adjusting DP in response to the individual system frame determinations.

3. (Currently Amended) The method of claim 2 wherein the specific uplink channel is a Random Access Channel (RACH), the common station comprises a radio network controller (RNC), one CUTS is provided per each system frame, eight code identifiers are provided as midambles for UE transmissions and ~~the parameter~~ DP is dynamic persistence or dynamic persistence level.

4. (Currently Amended) The method of claim 1 wherein the number of successful and failed ~~EU~~ UE transmissions in CUTSs is determined for multiple system frames spanning a selected time interval.

5. (Currently Amended) The method claim of 4 further comprising:

broadcasting a power control parameter (R) ~~R~~ to the UEs; and

adjusting ~~said-parameter~~ R in response to said determination over the selected time interval whereby the UEs adjust their transmission power after receiving an adjusted value for R in accordance with that adjusted value.

6. (Currently Amended) The method of claim 5 wherein the specific channel is a Random Access Channel (RACH), eight code identifiers are provided as midambles for UE transmissions and ~~the-parameter~~ R is a RACH power control parameter constant.

7. (Original) The method of claim 5 wherein the system frame is 10 microseconds and the selected time interval is 1 second so that the determination is based upon 100 frames.

8. (Currently Amended) The method of claim 7 wherein the specific channel is a Random Access Channel (RACH), eight code identifiers are provided as midambles for UE transmissions and ~~the-parameter~~ R is a RACH power control parameter constant.

9. (Currently Amended) The method of claim 5 wherein the number of successful and failed UE transmissions in CUTSs is also determined for individual

system frames further comprising:

broadcasting a dynamic persistence parameter (DP) ~~DP~~ upon which the UEs determine an access rate for transmitting in CUTSs; and

adjusting DP in response to the individual system frame determinations.

10. (Currently Amended) The method of claim 9 wherein the specific channel is a Random Access Channel (RACH), eight code identifiers are provided as midambles for UE transmissions, ~~the parameter~~ R is a RACH power control parameter constant and ~~the parameter~~ DP is dynamic persistence or dynamic persistence level.

11. (Original) The method of claim 9 wherein the system frame is 10 microseconds and the selected time interval is 1 second so that the determination is based upon 100 frames.

12. (Currently Amended) The method of claim 11 wherein the specific channel is a Random Access Channel (RACH), eight code identifiers are provided as midambles for UE transmissions, ~~the parameter~~ R is a RACH power control parameter constant and ~~the parameter~~ DP is dynamic persistence or dynamic persistence level.

13. (Currently Amended) The method of claim 4 wherein the specific channel is a Random Access Channel (RACH), further comprising:

broadcasting a dynamic persistence parameter (DP) ~~DP~~ upon which the UEs determine an access rate for transmitting in CUTSs; and

adjusting DP in response to said determination over the selected time interval whereby the UEs adjust their access rate to CUTS after receiving an adjusted value for DP in accordance with that adjusted value.

14. (Currently Amended) The method of claim 13 wherein the system frame is 10 microseconds and the selected time interval is 1 second so that the determination is based upon 100 frames, eight code identifiers are provided as midambles for UE transmissions and ~~the parameter~~ DP is dynamic persistence or dynamic persistence level.

15. (Original) The method of claim 4 wherein the system frame is 10 microseconds, the selected time interval is 1 second, the common station comprises a radio network controller (RNC), eight code identifiers are provided as midambles for UE transmissions and the specific channel is a Random Access Channel (RACH).

16. (Currently Amended) The method claim of 15 further comprising:

broadcasting a RACH power control parameter ~~RACH-constant~~ to the UEs;

adjusting said RACH parameter ~~RACH-constant~~ in response to said determination over the selected time interval whereby the UEs adjust their transmission power after receiving an adjusted value for said RACH parameter ~~constant~~ in accordance with that adjusted value;

broadcasting a dynamic persistence parameter (DP) ~~DP~~ upon which the UEs determine an access rate for transmitting in CUTSs; and

adjusting DP in response to said determination over the selected time interval whereby the UEs adjust their access rate to CUTS after receiving an adjusted value for DP in accordance with that adjusted value.

17. (Currently Amended) A common station configured for use in a telecommunications system in which a plurality of User Equipments (UEs) communicate with a the common station via communication signals having a system frame format with at least one commonly used time slot (CUTS) per frame which is available for common use by the UEs for transmitting code identified signals for a specific uplink channel, where the UEs select a code identifier from a plurality of identifiers and where a UE transmission with a selected code identifier in a selected CUTS will fail if another UE transmits with the same code identifier in

the same CUTS or if the UE transmission lacks sufficient power, ~~the system wherein the common station includes~~ comprising a memory for storing configured to store the number of successful and failed UE transmission in CUTSs per frame and processing circuitry ~~which determines~~ configured to determine whether UE transmission in CUTSs succeed or fail, ~~stores to store~~ the determination results as data in the memory and ~~adjusts to adjust~~ one or more communication parameters based on the data stored in said memory.

18. (Currently Amended) The ~~system common station~~ of claim 17 wherein the common station processing circuitry ~~determines and stores~~ is configured to determine and store the number of successful and failed UE transmissions in CUTSs for individual system frames and ~~adjusts to adjust~~ a parameter, upon which the UEs determine an access rate for transmitting in CUTSs, based on stored data reflecting the individual system frame determinations.

19. (Currently Amended) ~~The system of claim 17~~ A telecommunications system in which a plurality of User Equipments (UEs) communicate with a common station via communication signals having a system frame format with at least one commonly used time slot (CUTS) per frame which is available for common use by the UEs for transmitting code identified signals for a specific uplink channel, where

the UEs select a code identifier from a plurality of identifiers and where a UE transmission with a selected code identifier in a selected CUTS will fail if another UE transmits with the same code identifier in the same CUTS or if the UE transmission lacks sufficient power, the system wherein the common station includes a memory configured to store the number of successful and failed UE transmission in CUTSs per frame and processing circuitry configured to determine whether UE transmission in CUTSs succeed or fail, to store the determination results as data in the memory and to adjust one or more communication parameters based on the data stored in said memory and wherein the common station processing circuitry ~~determines and stores~~ is configured to determine and store the number of successful and failed UE transmissions in CUTSs for multiple system frames spanning a selected time interval and adjusts a parameter, upon which the UEs determine a power level for transmitting in CUTSs, based on stored data reflecting the determinations over the selected time interval.

20. (Currently Amended) The system of claim 19 wherein the common station includes a node b which is interfaced with a Radio Network Controller (RNC) where the node b has the processing circuitry which ~~determines~~ is configured to determine whether UE transmission in CUTSs succeed or fail and the RNC has the memory ~~for storing~~ configured to store the number of successful and failed UE

Applicant: Stephen G. Dick
Application No.: 09/995,144

transmission in CUTSs per frame and the processing circuitry which ~~adjusts~~ is configured to adjust one or more communication parameters based on the data stored in said memory.